



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,790	09/27/2001	Mike Farwick	32301WD230	9133
7590	07/03/2006			EXAMINER
SMITH, GAMBRELL & RUSSELL, LLP SUITE 800 1850 M STREET, N.W. WASHINGTON, DC 20036			STEADMAN, DAVID J	
			ART UNIT	PAPER NUMBER
			1656	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/963,790	FARWICK ET AL.	
	Examiner	Art Unit	
	David J. Steadman	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 March 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 5,9,12,34,35,37,38,40,42-44,46,48 and 51-56 is/are pending in the application.
- 4a) Of the above claim(s) 55 and 56 is/are withdrawn from consideration.
- 5) Claim(s) 5,9,12,34,37,40 and 42 is/are allowed.
- 6) Claim(s) 35,38,43,46,48 and 51-54 is/are rejected.
- 7) Claim(s) 44 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Status of the Application

- [1] Claims 5, 9, 12, 34-35, 37-38, 40, 42-44, 46, 48, 51-56 are pending in the application.
- [2] Applicant's amendments to the claims, filed on 12/9/2005 and 3/13/2006, are acknowledged. The claim listing filed on 12/9/2005 fails to comply with the requirements of 37 CFR 1.121 for the reason(s) set forth in the Office communication mailed on 3/7/2006. The claim listing filed on 3/13/2006 replaces all prior versions and listings of the claims.
- [3] Applicant's arguments filed on 12/9/2005 in response to the Office action mailed on 9/12/2005 have been fully considered and are deemed to be persuasive to overcome some of the rejections and/or objections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.
- [4] The text of those sections of Title 35 U.S. Code not included in the instant action can be found in a prior Office action.
- [5] The indicated allowability of claims 35 and 53-54 is withdrawn in view of the new rejection(s) that follow(s).
- [6] Applicant's request in the response filed on 12/9/2005 for an interview to discuss remaining issues is acknowledged. However, due to Office-imposed deadlines, the examiner is unable to schedule an interview before submitting the Office action for processing and mailing. If applicant would like to schedule an interview after receiving

the instant Office action, the examiner's contact information is provided in this Office action.

Election/Restriction

[7] Applicant requests rejoinder of method claims 55-56 with the allowed examined product claims. See p. 7 of the instant response. Applicant notes, "the language of new claims 55 and 56 is patterned after that of the allowed product claims." However, it is noted that for reasons set forth below, one or more of the product claims that correspond to products recited in claims 55-56 are not yet allowable. Thus consideration of method claims is not yet required. In the interest of compact prosecution, the following comments regarding claims 55-56 are provided.

MPEP § 2163 states, "when filing an amendment an applicant should show support in the original disclosure for new or amended claims" (MPEP 8th Ed., October 2006 Revision at pp. 2100-176 and 2100-183). Claims 55-56 were added in the amendment filed on 3/13/2006. To show support for the newly added claims, applicant asserts "[s]upport may be found in the specification and the claims as originally filed" (response filed on 12/9/2005 at p. 6). The examiner can find no support in the specification or the original claims for newly added claims 55-56. MPEP § 2163 further states, "[i]f the originally filed disclosure does not provide support for each claim limitation, or if an element which applicant describes as essential or critical is not claimed, a new or amended claim must be rejected under 35 U.S.C. 112, para. 1, as lacking adequate written description." As no support for claims 55-56 can be found, the

claims are considered to raise the issue of new matter. Applicant is invited to show support for the newly added claims.

Claim Rejections - 35 USC § 112, Second Paragraph

[8] Claim(s) 35, 38, 43, and 51-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

[a] Shen and Loeb in "The Encyclopedia of Molecular Medicine" (John Wiley and Sons, Inc., New York, 2002, pp. 1-12) teaches helicases have a plurality of activities, including DNA binding activity, RNA binding activity, 5'->3' translocating activity, 3'->5' translocating activity, and/or ATPase activity. Claims 35 (claim 38 and 53-54 dependent therefrom) and 55 (claim 56 dependent therefrom) are indefinite in the recitation of "the enzymatic activity of a DNA/RNA helicase" as it is unclear as to *the* activity referenced in the claims. It is suggested that applicant clarify the meaning of the phrase "the enzymatic activity of a DNA/RNA helicase."

[b] Claim 43 (claims 51-52 dependent therefrom) recites the limitation "the vector nucleic acid." There is insufficient antecedent basis for this limitation in the claim. Further, it is unclear as to *the* nucleic acid that is intended as being encompassed by the term "the vector nucleic acid." It is suggested that applicant clarify the meaning of the term "the vector nucleic acid."

Claim Rejections - 35 USC § 102

[9] Claim(s) 46 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Voet et al. ("Biochemistry, 2nd Ed.," John Wiley and Sons, Inc., New York, 1995). The claims are drawn to nucleic acid primer or probe consisting of a DNA fragment of SEQ ID NO:1 or a complement of the fragment, wherein the fragment consists of at least 30 or 40 consecutive nucleotides.

Voet et al. teaches codons which encode the 20 common L-amino acids (p. 966). This anticipates claims 46 and 48 as written.

In order to clarify the record, it is noted that the "complement" of claims 46 and 48 is not limited to a complement over the full length of the fragment of SEQ ID NO:1, but broadly encompasses a complement of any length of the fragment. Applicant may argue that a 3-nucleotide "complement" cannot be a primer or probe as recited in the claims. However, broadly interpreted the "complement" of claims 46 and 48 is not required to be a primer or probe for reasons that follow. Claims 46 and 48 can be interpreted in two ways. The first is a nucleic acid primer or probe consisting of: 1) a DNA fragment of SEQ ID NO:1 or 2) a complement of the fragment. A second interpretation of the claim is a nucleic acid primer or probe consisting of a DNA fragment of SEQ ID NO:1 OR a complement of SEQ ID NO:1 or the fragment thereof. The examiner has interpreted the claim according to the second interpretation. In this case, the triplets of Voet et al. are complements of SEQ ID NO:1 or fragments thereof. In order to overcome this rejection, it is suggested that applicant clarify that the "complement" is a complement over the full-length of the fragment of SEQ ID NO:1.

Conclusion

[10] Status of the claims:

Claims 5, 9, 12, 34-35, 37-38, 40, 42-44, 46, 48, and 51-56 are pending.

Claims 55-56 are withdrawn from consideration.

Claims 5, 9, 12, 34, 37, 40, and 42 appear to be in a condition for allowance.

Claim 44 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 35, 38, 43, 46, 48, and 51-54 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-272-0942. The examiner can normally be reached on Mon to Fri, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Steadman, Ph.D.
Primary Examiner
Art Unit 1656